

*Lepidoptera*  
DIVISION OF FOREST INSECT RESEARCH  
*Noctuidae*  
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Regional Forester, R-6  
Attn: Benton Howard

5220  
August 6, 1964

Philip A. Briegleb, Director

Biological evaluation

We were interested in the recent survey discovery of an outbreak of two cutworm species on Douglas-fir near Randall and Harlan, Oregon. These species were reared and identified in the course of past spruce budworm research work as Xylomyges simplex (Wlk.) and Achytonix epipaschia (Grt.). Per verbal request of P. W. Orr, we are transmitting tabulated descriptions of the larval instars to aid in recognition of larvae next spring. The more common of the two species, Xylomyges, overwinters as a pupa, while Achytonix adults will emerge and deposit eggs this summer. We hope this information will be of help to you in evaluating the outbreak.

Enclosures  
VMC:lin:hs  
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Gross Morphology of Achytonix epipaschia (Grt.), Noctuidae, a Feeder  
on Buds and New Growth of Douglas-fir

<u>Instar</u>	<u>Body Length</u> -mm-	<u>Head</u>	<u>Thoracic Shield</u>	<u>Setal Areas</u>	<u>Anal Shield</u>	<u>Remainder of Body</u>
7 (attacking buds)	4 +	black	black	black, raised	dark brown, orbicular	dark olive brown, with yellow brown in conjunctivae
+ 1	5 +	"	dark brown	dark brown, small	"	very pale olive green, with narrow central longitudinal white line; spiracular area whitish.
+ 2	7 +	pale yellow green	colorless	inconspicuous	colorless	apple green with three longi- tudinal white stripes on dorsum; white spiracular stripes.
+ 3	10 +	yellow- brown	"	small, raised	"	bright green with tinge of blue, with three longitudinal white lines on dorsum from prothorax to anal segment; yellow-white spiracular stripes.
+ 4	18 +	light green	"	"	"	same, but body without blue tinge.

Gross Morphology of Xylomyges simplex (Wlk.) Noctuidae, a Feeder  
on Buds and New Growth of Douglas-fir

<u>Instar</u>	<u>Body Length</u>	<u>Head</u>	<u>Thoracic Shield</u>	<u>Setal Areas</u>	<u>Anal Shield</u>	<u>Remainder of Body</u>
? (attacking buds)	4 +	black	black	black	black	yellow-green or light orange brown; no lines.
+ 1	8 +	"	"	"	dark brown	greenish-brown (olive), with three longitudinal white lines on dorsum; yellow-white spiracular stripe.
+ 2	10 +	"	very pale	"	no color	light green with three longitudinal white lines on dorsum; spiracular stripe.
+ 3	15 +	"	colorless, with median white line	black, raised	whole segment dark brown	"
+ 4	25 +	"	"	"	"	"